REMARKS

Reconsideration of the subject application in view of the present amendment is respectfully requested.

By the present amendment, a substitute specification and a replacement sheet of Fig. 2 have been submitted. Claims 2 and 4 have been cancelled. Claims 1 and 3 have been amended.

Based on the foregoing amendments and the following remarks, the application is deemed to be in condition for allowance, and action to that end is respectfully requested.

I. Objection to the Specification

The Examiner objected to the specification because of a number of formal errors therein. As noted above, a substitute specification has been submitted in which the formal errors, which were pointed out by the Examiner and found upon reviewing the specification, have been corrected. The Examiner's suggestion for amending the errors are appreciated.

The substitute specification is being submitted because of difficulty to make the numerous required amendments a mark-up copy in accordance with M.P.E.P. §608.01 (q) is also being submitted.

II. Objection to the Drawings

The Examiner objected to the drawings under 37 C.F.R. §1.84(p) (5) for not including reference characters mentioned in the specification. As noted above, a new drawing of Fig. 2 has been submitted in which the missing character "A" is shown. Approval of the replacement Fig. 2 is respectfully requested. The drawing of Fig. 2, together with a letter to Official Draftsperson is being submitted herewith.

With regard to Fig. 3, it shows a "heat recovery section 23" (an appropriate correction has been made in the specification).

The Examiner further objected to the drawings under 37 C.F.R. §1.84 (p) (4) because the same reference characters ("6" and "7") allegedly designate more than one element. It is respectfully submitted that each of characters "6" and "7" designate one and the same element, namely, additional steam – 6 and

additional oxygen – 7 (please see p. 25, lines 11, 15-16; p. 28, lines 4, 11, etc...).

III Rejection of Claims

The Examiner rejected claims 1 and 3 under 35 U.S.C. §103(a) as being unpatentable over Gravel, U.S. Patent No. 3,847,664 (Gravel) in view of, respectively, Babu et al., U.S. Patent No. 4,592,762 (Babu) and (Hanson). It is respectfully submitted that claims 1 and 3, as amended, are patentable over the applied references.

Specifically, claim 1 recites a process of the gasification of glass fiber reinforced which includes plastics feeding a glass fiber reinforced plastic material to a rotatable gasification furnace, heating the material to a temperature of 650 to 750°C in the presence of oxygen and steam to gasify the plastic component of the material, recovering the remaining glass fibers, introducing the resulting plastic gas into a plastic gas decomposition section, partially oxidizing the plastic gas at a temperature of 700 to 1000°C in the presence of

additional oxygen or an additional mixture of oxygen and steam, and recovering the Co and H_2 so produced.

As explained in the specification, the gasification in the presence of steam prevents generation of undersized higher hydrocarbon by products such as dioxides. The use of oxygen provides for generation of an increased amount of heat.

The use of a rotatable furnace permits to retain the plastic materials longer than twenty minutes. Further the retention time can easily be adjusted by adjusting the speed of rotation or the angel of the gradient of the furnace. Since the range of the particle size of the FRPs can vary at wide range, no treatment for the adjustment of the particle size would be necessary, by contrast to fluidized bed furnaces. All these advantages enable a complete gasification of raw materials with different particle sizes. This leads to a good performance against the fluctuation of the quality of raw FRPs. The rotatable furnace also permits to avoid the use of large amounts of gases, in contrast to fluidized bed furnaces which require large amount of gases to fluidize raw materials.

It is respectfully submitted that the process of Claim 1 is not disclosed or suggested in the prior art. Considering the prior art, Gravel does not disclosed gasification in a rotary furnace.

Babu likewise does not disclose the use of a rotary furnace. Babu also does not disclose partially oxidizing the plastic gas in a decomposition section.

In Hanson, the temperature range of the gasification is designated as 850-1050°F which is 460-570°C. The present invention gasifies FRPs at a higher temperature 650-750°C to get a higher gasification rate. Since the glass fibers contained in FRPs melt at 820°C or more, the present invention is not harmful to recover of glass fibers. The gasification at a temperature range of 460-570°C is too low to avoid big amount of undesirable remaining materials. Moreover, dioxins are generated at a temperature range of 450-500°C.

Since all claim limitations must be considered in an obviousness determination, and since the combination of Gravel and Babu fails to disclose several of the important and recited elements and features of independent Claim 1, it is respectfully submitted the present invention, as defined by claim 1, is not

rendered obvious by the combination of Gravel and Babu and is, therefore, patentably defines over said combination.

Claim 3 substantially corresponds to Claim 1, relies for its patentablity substantially on the same inventive features as Claim 1 and is, therefore, allowable for the same reason Claim 1 is allowable. Hanson like Babu, even if combined with Gravel, would not make the invention, which is defined by claim 3, obvious.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects, in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's amendment and the case passed to issue. Alternatively, should the

Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully Submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail and addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 8, 2003.

Alexander Zinchuk